

Claims

1. A packaging cell comprising a first, second, and third nucleic acid
5 constructs which regulate expression of one or more than one viral gene product
necessary for packaging a viral vector wherein

Sub a' 17
said first nucleic construct is capable of expressing an encoded first product;

10 said first product is capable of regulating expression of a second product encoded
on said second nucleic acid construct; and

said second product is capable of regulating expression of said viral gene product,
which is encoded by a sequence present on said third nucleic acid construct.

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~~2. The cell of claim 1 wherein said first nucleic acid construct comprises a
tetracycline regulated promoter/operator.~~

3. The cell of claim 1 wherein said first product is a transactivator of a
20 tetracycline regulated promoter/operator or a fusion protein comprising said
transactivator.

4. The cell of claim 1 wherein said second nucleic acid construct comprises a
tetracycline regulated promoter/operator.

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5. The cell of claim 1 wherein said second product is a rev protein.

6. The cell of claim 1 wherein said third construct comprises a promoter derived from a retroviral 5' LTR.

5 7. The cell of claim 1 wherein said viral gene product is a viral envelope or G protein.

8. The cell of claim 7 further comprising an additional nucleic acid construct that encodes retroviral gag and pol proteins.

10 9. The cell of claim 1 wherein said first product is tat protein or a chimeric protein comprising a tat protein.

10. The cell of claim 7 wherein said viral gene product is a G protein.

15 11. The cell of claim 1 which is stably transfected with said nucleic acid constructs.

12. The cell of claim 1 further comprising a conditionally replicating viral vector and wherein said cell packages said vector.

20 13. The cell of claim 12 wherein said vector is derived from HIV-1.

25 14. The cell of claim 13 wherein said G protein is a VSV or Mokola virus G protein.

15. A method of packaging a viral vector comprising culturing the cell of claim 13 under conditions wherein said first nucleic acid construct expresses said first product.